

## 1 WE CLAIM:

*Duffy A*

5 A connection comprising:

- a. a support member;
- b. a holder for compressibly holding a strap connector;
- c. a strap connector compressibly held by said holder; and
- d. fastener means attaching said holder to said support member.

2. The connection of claim 1 in which:

- a. said support member is a formboard for containing a concrete 10 foundation during pouring and setting; and
- b. said strap connector is a strap tie holdown.

3. The connection of claim 1 in which:

- a. said strap connector has a first face and a second face; and
- 15 b. said holder comprises an attachment portion, compression means and retaining means for retaining said compression means to said attachment portion.

4. The connection of claim 3 wherein:

20 said attachment portion of said holder has a first surface that interfaces with said first face of said strap connector and said compression means of said holder has a second surface that interfaces with said second face of said strap connector, compressibly holding said strap connector.

25 5. The connection of claim 4 wherein said attachment portion of said holder further comprises:

- a. a first portion for attaching said holder to said support member in combination with fastener means; and
- b. a second portion joined to said first portion wherein said first 30 surface of said attachment portion is located on said second portion.

6. The connection of claim 5 in which said retaining means of said holder further comprises:

- a. a third flange joined to said second portion;
- 35 b. a fourth flange joined to said second portion;
- c. a fifth flange joined to said third flange;

1 d. a sixth flange joined to said fourth flange.

7. The connection of claim 6 wherein:  
5 a. said fifth flange and said second flange converge toward each  
other; and  
b. said sixth flange and said second flange converge toward each  
other.

6 8. The connection of claim 7 wherein:  
10 a. said first portion is a first flange and said second portion is a  
second flange disposed substantially orthogonally to said first flange;  
b. said third flange is disposed substantially orthogonally to said  
second flange;  
c. said fourth flange is disposed substantially orthogonally to said  
15 second flange;  
d. said fifth flange is disposed substantially orthogonally to said  
third flange; and  
e. said sixth flange is disposed substantially orthogonally to said  
fourth flange

20 9. The connection of claim 8 wherein:  
a. said second flange is joined to said first flange at a first linear  
juncture;  
b. said third flange is joined to said second flange at a second  
25 linear juncture;  
c. said fourth flange is joined to said second flange at a third linear  
juncture;  
d. said fifth flange is joined to said third flange at a fourth linear  
juncture; and  
30 e. said sixth flange is joined to said fourth flange at a fifth linear  
juncture.

10. The connection of claim 9 wherein said compression means of said  
holder is a wedge dimensioned to closely fit within the space defined by said  
35 second, third, fourth, fifth and sixth flanges.

1 11. The connection of claim 10 wherein said wedge further comprises:  
a tapered portion having a broad end and a narrow end and a tab  
joined to said tapered portion at said broad end.

5 12. The connection of claim 11 wherein:  
a. said tapered portion of said wedge further comprises a pair of  
raised guides on said second surface that closely fit said strap connector;  
and  
b. said attachment portion of said holder further comprises a first  
10 reference tab and a second reference tab.

13. The connection of claim 12 wherein said attachment portion of said  
holder further comprises a planar gusset that is perpendicular to and  
connects said first flange and said second flange.

15 14. The connection of claim 13 wherein:  
a. said first flange of said attachment portion further comprises  
fastener openings; and  
b. said fastener means are fasteners.

20 15. The connection of claim 3 wherein:  
a. said holder further comprises a transition portion connected to  
said attachment portion having a first surface that interfaces with said first  
face of said strap connector; *AS4*

25 b. said compression means of said holder has a second surface  
that interfaces with said second face of said strap connector, compressibly  
holding said strap connector and said compression means is a screw with a  
proximal end and a distal end and said second surface being at said distal  
end; and

30 c. said retaining means is a retaining portion attached to said  
transition portion, said retaining portion having a threaded opening that  
threadably receives said screw.

16. The connection of claim 15 wherein:

1 a. said attachment portion further comprises a fastener portion fixing said holder to said support member in combination with fastener means;

5 b. said transition portion further comprises:

5 i. a first strap receiving portion with a first slot closely dimensioned to receive said strap connector, said first surface being a side of said first slot ; and

10 ii. a second strap receiving portion, with a second slot closely dimensioned to receive said strap connector, said first surface being 10 in line with a side of said second slot.

17. The connection of claim 16, wherein said holder further comprises a fourth flange joined to said fastener portion.

15 18. The connection of claim 16, wherein:

a. said retaining portion is a second flange disposed substantially orthogonally to said first strap receiving portion;

b. said second strap receiving portion is a third flange disposed substantially orthogonally to said second flange; and

20 c. said fourth flange is disposed substantially orthogonally to said fastener portion.

19. The connection of claim 18, wherein:

a. said second flange is joined to said strap receiving portion at a 25 first linear juncture;

b. said third flange is joined to said second flange at a second linear juncture; and

c. said fourth flange is joined to said fastener portion at a third linear juncture.

30 20. The connection of claim 19, wherein:

a. said first linear juncture, said second linear juncture and said third linear juncture are reinforced with raised embossments;

b. said fastener portion further comprises fastener openings; and

35 c. said fastener means are fasteners.

1 21. The connection of claim 3 in which:

- a. said attachment portion further comprises:
  - i. a first portion for attaching said holder to said support member in combination with fastener means; and
  - ii. a wedge having a first surface, said wedge being joined to said first portion;
- b. said compression means is a sleeve having a second surface closely dimensioned to fit said wedge such that said strap connector passes through said sleeve and is compressed between said first surface of said wedge and said second surface of said sleeve, and said retaining means are incorporated in said compression means.

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